Customer No.: 31561

Docket No.: 13565-US-PA Application No.: 10/709,956

**AMENDMENT** 

Please amend the application as indicated hereafter.

To the Claims:

Claim 1 (previously presented) An earphone structure, comprising:

a case;

a cover, mounted on an opening of the case, and defining a space together with the

case;

a main speaker fixed on the cover, and adapted for generating a sound wave;

a composite chamber, accommodated in the space defined by the case and the

cover, and fixed on the cover, wherein the composite chamber defines a composite room

together with the cover on which it is fixed; and

a plurality of sub-speakers fixed on sidewalls of the composite chamber for

generating sound waves and mixing the generated sound waves in the composite chamber

so as to configure a composite sound field in the composite room,

wherein the sound wave generated by the main speaker and the sound waves

generated by the sub-speakers are propagated out of the earphone through the cover.

Claim 2 (original) The earphone structure of claim 1, wherein the sub-speakers

comprise a first channel speaker and a second channel speaker, which are disposed on two

opposite sides of the composite chamber.

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Claim 3 (original) The earphone structure of claim 2, wherein a position where the

first channel speaker is disposed at and a position where the second channel speaker is

disposed at are not symmetrical.

Claim 4 (original) The earphone structure of claim 2, wherein the sub-speakers

further comprises a subwoofer speaker.

Claim 5 (original) The earphone structure of claim 4, wherein the subwoofer

speaker is disposed on a back side of the composite chamber.

Claim 6 (original) The earphone structure of claim 1, wherein the composite

chamber is a hollow column.

Claims 7-15 (cancelled)

Claim 16 (original) The earphone structure of claim 1, wherein the earphone

structure receives a signal which has been processed by a sound field simulation process

for generating a simulation sound field by the sub-speakers and the main speaker inside

the.

Claim 17 (original) The earphone structure of claim 16, wherein the sound field

simulation process is designed based on a frequency-divided point of the sub-speakers.

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Claim 18 (original) The earphone structure of claim 16, wherein the sound field

simulation process is designed based on a frequency-divided point of the sub-speakers

and a delay process.

Claims 19-54 (cancelled)

Claim 55 (currently amended) An earphone structure disposed inside a space

defined by a case and a cover, comprising a composite chamber defining a composite

room therein, wherein the case and the cover jointly cover the composite chamber for

forming the earphone structure, and The earphone structure of claim 1, wherein the

composite chamber receives a plurality of sound source signals from different directions

and respectively applied to the sub-speakers, such that a composite sound field is formed

by the sound source signals in the composite room.

Claim 56 (original) The earphone structure of claim 55, wherein the sound source

signals at least comprise a first sound source signal and a second sound source signal,

which are originated at opposite sides of the composite chamber, respectively.

Claim 57 (original) The earphone structure of claim 56, wherein a location where

the first sound source signal is originated at and a location where the second sound source

signal is originated at on the opposite sides of the composite chamber are not

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symmetrical.

Claim 58 (original) The earphone structure of claim 56, wherein the sound source

signals further comprise at least a subwoofer sound source signal.

Claim 59 (original) The earphone structure of claim 58, wherein the subwoofer

sound source signal is originated at a back side of the composite chamber.

Claim 60 (original) The earphone structure of claim 55, wherein the sound source

signals are the signals which have been processed by a sound field simulation process for

generating a simulation sound field in the composite chamber.

Claim 61 (original) The earphone structure of claim 60, wherein the sound field

simulation process is designed based on a frequency-divided point of the sound source

signals.

Claim 62 (original) The earphone structure of claim 60, wherein the sound field

simulation process is designed based on a frequency-divided point of the sound source

signals and a delay process.

Claims 63-70 (cancelled)

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